

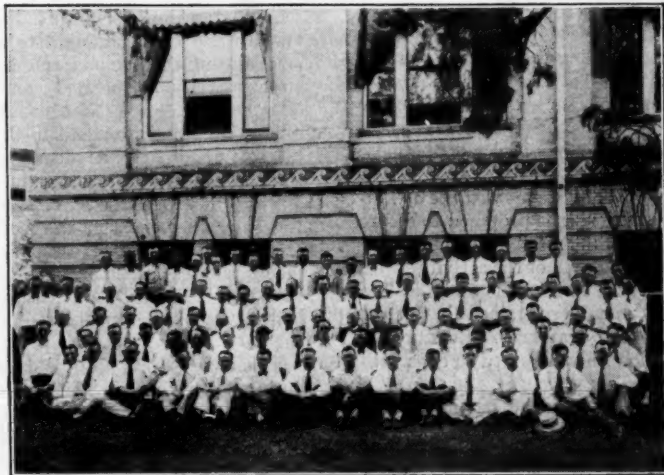
H. F. Stewart

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Agricultural Education



Georgia Teachers of Vocational Agriculture Annual Conference

*Every man owes some of his time to the
upbuilding of the profession to which
he belongs.—Roosevelt.*

EDITORIAL COMMENT

AGRICULTURAL EDUCATION

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OUR REAL RESPONSIBILITY

TO TRAIN present and prospective farmers for "proficiency in farming" has been accepted as a statement of the major objective in Vocational Agricultural Education.

We have also set up a series of contributory objectives, a long list of desirable abilities, and a large number of excellent means of accomplishment. This material, as published in the Federal Board mimeograph circular number 1046, will be of much value in guiding us toward accomplishment in Vocational Agriculture.

Back of all of the activity leading to the attainment of our objectives, however, we must have clearly in mind that there are two contrasting procedures which will influence the methods which we follow. The ultimate success of vocational agriculture will depend upon our choice of the more effective procedure.

One procedure is characterized by the *dominance of subject matter*. Under this conception, it is proposed to secure "proficiency in farming" by seeing that the trainee experiences, both directly and vicariously, all of the activities with which he will be concerned as a farmer. The implication seems to be that the student may be so trained that at the close of his formal education in Vocational Agriculture, he may go out into the occupation fully prepared to cope with the situation as he finds it.

The second procedure contrasts with the first in that the development of the *ability to think in the realm of the farming occupation* is the dominant idea. Under this procedure, subject matter is secondary, a means to an end, a tool to be utilized in the training process. This conception recognizes the utter impossibility of training in the present for all the exigencies of the future. It recognizes the certainty of change; it anticipates the need on the part of farmers for ability to solve new problems as they arise. This procedure further recognizes the futility of trying to give a trainee adequate experience in all of his activities, even those expected of him in farming as it is now constituted.

It seems inconceivable that sober thought would not lead us to accept the second procedure as the more desirable. This should be true both as to the theory and practice of our work in vocational agriculture. It appears to be altogether too true, however, that our practice is more frequently controlled by the subject matter concept. We must, therefore, occasionally check ourselves and get back on the more direct and desirable course leading to the accomplishment of our objectives.

Ability to "solve farm problems satisfactorily" distinguishes the successful from the unsuccessful farmer. This, in the majority of cases, resolves itself into ability to "arrive

at correct judgments when faced with new situations." The methods followed in our training of "present and prospective farmers" must recognize this need. We must provide the maximum opportunity for *thinking* in our training program. We must never fail to include the *why* with the *how*, *when*, *where*, and *who*. We must select *typical* subject matter situations as training tools in order that transfer thru association may be more definitely assured. We must give our students systematic and conscious training in proper methods of thinking, reasoning, and judging.—S. D.

AGRICULTURAL EDUCATION GROWS

VOCATIONAL agricultural education is still in its infancy. Phenomenal growth has characterized this type of education. Indeed a person is sometimes impressed with the idea that its growth has been too rapid for stability and balance. Such agencies as *Agricultural Education* and *Future Farmers of America* will do much to consolidate the gains which have been made and bring public sentiment to the support of this cause in no uncertain terms.

Agricultural Education has been published and distributed to the workers in the field for a little over a year and one-half. It is very gratifying to see how the men in the field are rallying to the support of this publication. This is especially true in states where the teachers in agriculture have a strong state organization.

A good example of what is being done in several of the states was recently brought to my attention. In a certain state during the summer conference, the president of the state association appointed a budget or finance committee. This committee took into consideration the needs of the organization and proposed to the conference the following budget: \$1 for A. V. A. membership, \$1 for subscription to *Agricultural Education*, \$1 to meet the expenses of sending a representative to the A. V. A. convention, and \$1 to cover the annual expenses of the state organization, making a total of \$4 for each member. This budget was passed unanimously and each member made a personal check for \$4 to the state treasurer. The treasurer in turn will meet these obligations of the members of the organization with one check.

This type of procedure is commendable and is the only businesslike manner in which to handle matters of this kind. It spells efficiency in organization, unity of purpose, evidence of co-operative effort, and loyalty to a cause. It is quite a contrast to the procedure of pestering teachers from month to month by long distance thru the News Letter.

One of the fundamental reasons which justifies our program in vocational agriculture in secondary schools is our proposal for teaching the Future Farmer co-operative effort. How can a teacher effectively administer a program in co-operative effort when he himself does not wholeheartedly co-operate with his fellows in supporting the organizations and institutions which promote the national program?

Many of the leaders in agricultural education thruout the country have contributed freely of their time and talents in making it possible for the readers of *Agricultural Education* to have available some of the choice bits of the philosophy of agricultural education, an enumeration of many teaching devices, a digest of new sources, and an inspiration to do a better job. It will therefore be a source of gratification to these men to see the states one by one placing their name in the 100 percent column for subscriptions to *Agricultural Education*.—L. R. H.

Tune in on F. F. A. Contest, then send a card.

Agricultural Education October 1930



Professional



Why High School Agriculture Departments Discontinue

C. R. WISEMAN, Teacher Trainer, South Dakota State College



C. R. Wiseman

NOT infrequently we hear that an agriculture department has discontinued. Local school authorities and state and federal educational officials should be interested. Particularly the instructor of vocational agriculture should be interested. Sometimes he is the causal factor. At other times he is the victim of circumstances and has tied himself up to work in a community as instructor in vocational agriculture where conditions are such that the best of instructors would be practically doomed to failure. Not only should the community select a capable instructor to carry on the work in vocational agriculture but the instructor should intelligently exercise some choice in the community where he can expect to carry on his work.

This article undertakes to set forth certain factors of continuance or discontinuance of agriculture departments. The data were secured for some 135 high schools in Minnesota which had departments of agriculture 1918-19 and later. Many comparisons were made between those schools where agriculture continued and those schools where agriculture discontinued. Corroboratory evidence on general causes of discontinuance as well as valuable suggestions for checking both proposed locations for new departments and older departments now operating was secured from several states.

Survey of Factors

This article is in the main devoted to that very important factor—The Agriculture Instructor and his Program of Work. However, the reader will wish to see this factor in relation to other factors considered in the study.

Certain of the factors concerned the features of the community and the high school as an institution—such as geographical distribution of departments, agricultural interests of the communities, the agricultural depression, size of high school, agricultural extension work, economic aspects of the school district as to their assessed valuations and predominating tax-rates. Consolidation was also considered as a factor. Some of these are scarcely amenable to control. Size of high school seemed to be a significant factor. Discontinuances were somewhat more prevalent in smaller high

schools. On this factor of size of high school the principle was derived from the data that "choice of a reasonably sized high school for agriculture work was desirable"—"chances for continuance are signally better in one of more than 100 pupils than for one of fewer than 100 pupils."

Other factors concerned the agriculture department such as enrollment in the agriculture department, state requirements as to equipment and enrollment, recruiting practices, costs of instruction and breadth of the agricultural program. On the factor of enrollment in the department, the principle was derived from the data that "Departments with an enrollment of 20 or more are considerably more likely to survive than those less than 20." "Those near the minimum for enrollment are in danger of discontinuing."

Another set of factors considered attitudes and relationships of groups of people vitally concerned such as attitude of the farm boys, attitude of farm people, attitude of town people, attitude of school board members, and attitudes and activities of superintendents.

However, in this article we can only consider the agriculture instructor and his work.

The Instructor and His Program

We are considering in this section, first, certain problems relative to the instructor himself and second, certain phases of the work of the department as carried out by the agriculture instructor.

Compared to other high school teachers we are led to believe that the training of teachers of vocational agriculture is reasonably high. Holton in Federal Board Bulletin No. 122, 1927, describes a typical teacher as follows:

"The teacher of vocational agriculture is a man 30 years of age; he has a Bachelor of Science degree from a standard agricultural college and has had 9 semester hours of graduate work; he was born and reared on a farm and has had 11 years of practical experience in farming; he has been teaching vocational agriculture three years and has had one year experience in teaching other subjects before he began teaching vocational agriculture; he receives an annual salary of \$2,400."

In this study considering only men who were the last instructors where agriculture departments discontinued, the ex-superintendents in checking these men on the item of "Adequacy of his preparation for organizing and teaching vocational agriculture" check 66 percent of them as being *Very Good* or *Good*. Evidently the superintendents felt that

lack of preparation of these men was not a main factor for department discontinuance.

Some relation of tenure to discontinuance was found. For the group of continued departments in Minnesota, included in the study, the average tenures of the instructors was computed as 3.1 years. Eleven out of 45 or over 25 percent had tenures of 5 years or more, and 17 percent had a one-year tenure. On the other hand, for the discontinued departments, the average tenure of instructors was computed as 1.82 years with scarcely 4 percent for 5 years or more and more than 50 percent for one year. These data definitely show longer tenures in continuing departments and furthermore these tenures were not completed but still going on.

Another interesting phase of this study of the instructor was provided by the check lists on the instructors, by the ex-superintendents and by the state supervisors. Each rendered a judgment concerning men whom he knew. Any item on the check list could be marked *Very Good—Good—Fair—Poor*. Instructors were checked who were last at the school before the department was discontinued. In arriving at the ranks here given, the responses checked *Fair* and *Poor* were first combined and computed as percentages of the whole number possible and then were reduced to ranks. The ranks for the 12 items by the ex-superintendents and state supervisors were close, the average disparity of ranks for these two groups being 1.25.

Since in the tabulations only the *Fair* and *Poor* checks were counted as reported by the ex-superintendents, then the item on which there was *least* criticism was given 1st rank and the one on which there was *most* criticism was given 12th rank.

Table—Ranks for Check Items on Agriculture Instructor
(From least to most criticism)

- 1st rank—Co-operation with the superintendent.
- 2d rank—Mature enough for the work.
- 3d rank—Co-operation with the principal and fellow teachers.
- 4th rank—Adequacy of his vocational preparation for organizing and teaching vocational agriculture.
- 5th rank—Developed the agriculture department as an integral part of the school.
- 6th and 7th ranks—(Tie)
Adequate experience

(Continued on the next page)

teaching agriculture. Identified himself well with the best interests of village and city there.

8th rank—Success in his classroom work.

9th rank—Adequately broad program of work in the agriculture department (all-day, part-time, evening class, club-work, extension activities).

10th rank—Success of his project work.

11th rank—Personal qualities for success in work.

12th rank—Impressed the farmers with his school program of agriculture.

Let us note more particularly the meaning of the last three items as ranked. The percentages (marked *Fair* and *Poor*) for these items were 56 percent, 61.2 percent and 73.5 percent respectively. These mean that in checking these instructors on these factors the ex-superintendents in 56 percent of the cases regarded them as *fair* or *poor* in personal qualities for success in the work and in 73.5 percent of the cases regarded them as *fair* or *poor* in impressing the farmers with their school program of agriculture. In the same manner the superintendents in 33 percent of the cases regarded the instructors as *fair* or *poor* in adequacy of his preparation for organizing and teaching vocational agriculture (rank 4).

The Department's Program of Work

It has often been said that mere teaching of high school classes is not a full job for the agriculture instructor and not conducive to success. Usual phases in a broad program are: Teaching high school agriculture classes, teaching elementary agriculture, part-time work, evening school work, club work, and so on. Beyond these the live agriculture instructor often carries on extra-curricular activities. The table shows the extent of activity.

Frequencies With Which Agriculture Departments Carried on Organized Agriculture Activities

Number of Activities	Number of Depts.	
	Cont'd Depts.	Discont'd Depts.
1. Teaching High School Agriculture Classes Only	0	2
2. One Additional Activity	7	11
3. Two Additional Activities	16	15
4. Three Additional Activities	10	9
5. Four Additional Activities	4	1

The study secured information concerning several types of activities carried on by agriculture instructors along with and in connection with their instructional duties. Such activities denote *functioning* of the agriculture departments. The types of activities found and the frequency with which they were reported are shown in the table.

From the table we note that the reports from the continued departments exceed those from the discontinued departments in all but one case which is the same for both groups. On several items those frequencies for the continued

Frequencies With Which Agriculture Instructors Were Carrying Out Certain Activities Pertaining to the Functioning of Agriculture Departments

List of Activities	Cont'd Depts. 37 Returns	Discont'd Depts. 39 Returns
1. Satisfactory carrying out of the farm practice work or project work by most of the boys in the agriculture class	36	27
2. Organization of the boys in the agriculture class into a club and regular club meetings	12	11
3. Participation by the agriculture department in agricultural judging contests in competition with students from other agriculture departments	36	15
4. The department won a reasonable share of prizes at those judging contests	24	10
5. The department assisted the farmers with their problems such as testing seed corn, securing good seed, soil examinations, testing milk, etc.	34	29
6. Field trips to the farms in the community a usual feature of the agricultural work	35	26
7. Sponsoring of meetings of farmers as farmer institutes, corn shows, etc.	23	19
8. Agriculture department held a father-son banquet	2	2
9. Visitation by the farmers to the agriculture department while class was in session a common occurrence	6	5
10. Field trips by the class to creameries, elevators, implement shops, stockyards, etc., a common feature of the work	31	27
11. Public exhibition down town or at the school of some of the work of the agriculture department	20	18
12. A report of the work of the agriculture department in the local newspaper a common occurrence	30	20
13. The farmers sought discussion with and help from agriculture department on some of their problems	35	26
14. The department had demonstration teams and these demonstrated in school and at public meetings	14	9
15. Visitation by the agriculture instructor, without his class, with farmers at their farms a common occurrence	35	23

departments are considerably higher, several approximating 100 percent of the total number. It is evident that the continued departments functioned considerably better in these activities.

In addition to the above, in several conspicuous instances, the recruiting practice in the continued departments was much better than in the others. Instances were: visitation of farm homes of prospective students, agriculture instructor assisting in the regular high school registration, only farm boys and others interested registered for agriculture, and registration of only those able and willing to meet the requirements.

The main conclusions and recommendations of this section of the study are:

A longer tenure is found among continued departments. The agriculture instructor is not faulted nearly so much on his maturity and training as he is on his lack of personal qualities for success in his work, lack of success in his project work and lack of success in impressing the farmers with his program. Continued departments engage in two or three activities additional to teaching high school classes of agriculture. They conduct more part-time and evening work. Continued departments seemed to function better on a list of several type activities checked and recruiting was evidently done better in the continued departments.

Doubtless some agriculture departments discontinued despite heroic efforts on the part of the agriculture instructor. Other factors are mainly responsible. On the other hand many times lack of satisfactory work on his part is a contributing if not a main cause of discontinuance. The alert instructor will periodically check himself and his program of work. If he can prevent it, he does not want to see one or more discontinued departments commemorating his poor service.

ALABAMA TEACHERS OF VOCATIONAL AGRICULTURE PROVE PROFESSIONAL LOYALTY

For three years in succession the Alabama teachers of Vocational Agriculture have subscribed 100 percent to Agricultural Education and every teacher has paid his dues in the American Vocational Association and in his own state Association.

Two years ago some 110 teachers of vocational agriculture at their summer conference voted unanimously to back up the movement for an agricultural publication and each teacher send in subscription to help get the publication started. They also voted 100 percent to pay their dues in the American Vocational Association and the State Association. One year ago the number had increased to 118 and they again voted 100 percent to subscribe to Agricultural Education and to pay state and national dues.

This past summer for the third time they have already collected the subscriptions to Agricultural Education and state and national dues for another year from 100 percent of the men now numbering better than 120. As an additional responsibility they increased the state dues this year and this increase will be used to send one of the group to the annual meeting of the American Vocational Association each year. The following plan for selecting this delegate was decided upon: One man in the group has been in vocational work ever since it started in Alabama some thirteen years ago and has been in one community 11 years; this man will represent the teachers at Milwaukee in December. He is L. J. Howell of Reform, Alabama. Next year the next oldest man in vocational work in the state will be the delegate, and so on down the line.

W. L. Walsh, McKenzie, Alabama, is president of the State Association for Vocational Agriculture teachers and J. E. Morris of Ramer, Alabama, is secretary.

Don't forget! F. F. A. Contest, November 17, 8-9 p. m.



Methods



The Field Trip as a Method of Teaching

CLYDE B. CAMPBELL, River Falls, Wisconsin State Teacher's College

THE field trip if properly conducted is a valuable method to use in teaching Agriculture on a vocational basis. The purpose of the field trip is to aid in the solution of a problem by:

1. Observation and identification.
2. Application or development of principles.
3. The teaching of skills.

A field trip on silo filling which is the subject of this discussion would include the first and second and in some cases the third. The stage of maturity is an important principle in the process of silo filling, not easily demonstrated in the class room. In the field however opportunity is afforded for observation and the forming of judgments. Shall water be added while filling? Yes we say, when the corn is dry. But is not the degree of dryness and the amount of water to use both problems requiring judgment?

The following incident shows the necessity of skill in the operation of an ensilage cutter. A farmer was filling his silo and thought his tractor lacked power. He called the service man from the tractor company who assured the man that the tractor was delivering full power and that the ensilage cutter was not too large for the tractor. The writer was then called to the farm and attacked the problem by first going to the silo to find the stalks not squarely cut and partly shredded. When the knives were sharpened and properly adjusted the tractor had power to spare and a better quality ensilage was produced. The sharpening and adjustment of the knives are skills more properly taught in actual contact with the problem than under class room instruction.

In addition to the objectives named for which the trip may be taken there are the added values of stimulation and motivation. Opportunities for reflective thinking are made possible during and following the field trip.

Points to Consider

Some of the points to consider in taking the field trip are:

1. Does it make teaching more effective?
2. Does it save time?
3. Does it bring out points which could not be made effectively in the class room?
4. Does it offer an opportunity of gaining information thru actual contact with the problem which could not be gained otherwise?
5. Does the contact with experienced men on the trip have additional educational value?

The answers to these questions will help to determine the value of the field trip. Careful planning and organization

on the part of the teacher are essential if these ideals are to be realized. Superintendents and others have frequently criticized field trips as "time wasted," "boys do too much playing," "field trips are joy rides," "work has no serious purpose," "teachers do not have work organized." Much of this criticism has undoubtedly been justified when the work was poorly planned and where the aims and objectives have not been made clear. The spirit of play often pervades the class and much unjust criticism of the boys and the school is made by casual observers. Many teachers overcome this by charging the class with the seriousness of the problem and with their responsibility in upholding the dignity of their work and the honor of the school by close observation and gentlemanly conduct.

"Farm boys have had experience in silo filling and a field trip is a waste of time," a supervisor once remarked. To check this situation an inventory test is advisable. Any student who can make a score of 90 or above on the following test might well be excused from making the trip. Let him explore the field in study and research and make his contribution to the class.

Inventory Test Subject—Silo Filling

1. At what stage of maturity should corn be put in silo?
2. Should corn be put in fresh or allowed to dry?
3. How does dry corn affect quality of silage?
4. Under what conditions would you add water to silage? How much?
5. Is it necessary to tramp silage in order to have good quality?
6. Is it essential to have some one in the silo to distribute silage evenly? Why?
7. Which is more important tramping or even distribution of silage?
8. By what two methods may spoilage be prevented on top?
9. About how many feet will silage settle in a 40-foot silo?
10. How long before it can be refilled?
11. How many years will silage keep?
12. Does distance from field effect cost of filling silo? How?
13. What special type of silage wagons have you seen?
14. How is capacity of an ensilage cutter measured?
15. What two types of cutters are generally used?
16. Give one advantage of each type?
17. What is the proper length of silage cuts?
18. What are two advantages of a

- long cut?
Of a short cut?
19. What crops are used for silage?
20. Are any silos in your community not being used? Why?
21. If corn goes thru the cutter partly shredded and not squarely cut what two remedies would you suggest?

Organizing the Field Trip

In organizing the field trip it seems advisable to divide the plans and preparations into three sections. They are:

1. The pre-visit activities.
2. The field trip.
3. The post-visit activities.

The reasons for this are apparent. The problems to be solved must be presented or discovered before going to the field to avoid waste of time. The limitations of the classroom method for the solution of some of these problems must be recognized. The summary of the problems and the opportunities for reflective thinking are consummated to best advantage in the post-visit activities.

The following list of questions arranged according to the above outline may be found useful in the study of silo filling. These may be mimeographed and placed in the hands of each pupil at the beginning of the study. Most of the questions might well be developed with the boys before they are given out on the mimeographed sheets.

Pre-Visit Activities

1. Are silos desirable in this section?
2. What percent of farmers have silos in the United States? Your state? County?
3. In what stage of maturity should corn be cut?
4. How long after cutting should corn be put into the silo?
5. Does frosted corn make good silage? Why?
6. Would you add water to corn while filling silo? How much?
7. Is it necessary to distribute silage evenly? Why?
8. Is it necessary to tramp silage?
9. Which is more important, even distribution or tramping?
10. How is waste prevented on top of silage?
11. How many feet will silage settle?
12. How long before the silo can be refilled?
13. How many years will silage keep?
14. How many silos in your community are not being used? Why?

(Continued on page 64)

How Shall We Measure?

A. H. HAUSRATH, Iowa State College, Ames, Iowa.



A. H. Hausrath

DOES instruction in vocational agriculture produce results? This is a question that vocational teachers and administrators should be able to answer.

Much effort has been expended and many different means proposed to measure the effectiveness of vocational agriculture instruction. Most of the devices suggested for measuring vocational agriculture instruction are subject to serious criticism.

Supervised farm practice records are almost entirely financial. These records cover only one or two phases of each boy's instruction, such as a hog or poultry project. Dollars earned per hour or labor, net profit per sow or per hen, cost of producing a pound of pork or a dozen eggs, are all worth while measures in themselves, but they are too greatly affected by factors beyond the control of the pupil. A particularly favorable market might indicate unusual success in a really mediocre project. Projects are usually of limited scope and the methods used might be adapted to the larger whole-farm unit. In addition, this method of using supervised farm practice records does not provide a means of comparing the work of the farmers reached by the instruction with the work of the farmers not reached by the instruction in the same community.

Supervised farm practice records do permit of some comparison between communities as to the results of supervised practice but they do not take into account the inherent differences between the communities themselves. Better results would be expected in a prosperous farm community than in a community with poor soil, shiftless tenants, or other handicaps. Certain communities of the latter type are probably in greater need of vocational agriculture instruction, may benefit more than financial results indicate, and may be accounting more creditably for the state and federal money expended in them, than in certain communities with better natural opportunities.

Information tests given pupils at the end of their vocational agriculture instruction measure only possession of knowledge. There is no assurance that knowledge possessed will be used. The knowledge so measured may be soon forgotten as is the case with much school learning. The teaching is likely to be directed toward "passing the examination" rather than toward efficient farming. Farming is a complex adjustment of managerial and manipulative skills. Managerial skill depends on the possession of knowledge and the ability to use that knowledge effectively. Such tests measure principally only possession of knowledge and not the pupil's ability to use it.

Score-cards have been extensively

used to measure the results of vocational agriculture instruction. Usually score-cards measure facilities available, effort expended, and plans of work to be done, but do not measure actual results accomplished. Scoring is highly subjective and is comparable only when the same person does all the scoring. Scoring is more useful in determining the rank of different departments in the same state but not to show just what has been accomplished in each community.

Annual reports of instructors likewise show effort expended rather than results accomplished. They are useful in indicating initiative and aggressiveness of teachers but little else.

Follow-up studies, to determine the percentage of former vocational agriculture pupils now engaged in agricultural occupations, indicate only whether or not the work has reached the group that should have received such instruction. Such studies do not measure the effect that vocational agriculture has had upon these pupils.

Testimonials are notoriously exaggerated. They have all the faults of the other devices and several other shortcomings of their own.

Achievement stories are usually selected and represent the extreme and not the typical condition. They are no true measure of what is being done.

Objectivity is a primary need in any measuring device. This will eliminate the differences that would result from interpretation by different individuals. One individual might say the day is warm, another that it is hot; but if one said the temperature is 86 degrees, all would know just how hot it is. The Fahrenheit scale is an objective measure of temperature; the descriptive terms: warm, hot, cool, cold, are subjective measures of temperature.

Reliability is another need of any measuring device. Automobile manufacturers equip cars with speedometers designed for that car with a certain size tire. When the owner puts oversize tires on the car the speedometer will register fewer miles, for a given distance traveled, than it would with the smaller tires. The change to larger tires has made his speedometer less reliable than it originally was. The measuring device used must measure the same today as it will tomorrow, next week, next year, or ten years hence. Price fluctuations make financial accounts unreliable when used as measuring devices.

Validity is another essential of a good measuring device. It is not valid to assume that the greater the number of pounds of pork produced per sow in a ton litter contest indicates greater efficiency. The point of diminishing returns is likely to be passed. The measuring device should measure the thing it is supposed to measure. If it is farming efficiency we wish to measure the measuring device should actually measure that. We have assumed much and determined little. No matter how reliable and objective data may be, if it is not valid it fails completely to establish any truth.

Objectivity, reliability, and validity are essential. *Practicability* is also desirable. By practicability is meant the facility with which the measuring device may be used. If the device can be used only by highly trained specialists, if it takes a full time worker a month to use the device in each community or school, if it involves the use of expensive supplies, equipment, methods, and high priced help, and if it depends on the intelligent co-operation of any large number of people, the difficulty in using the device may be so great as to render it impractical.

The community farm survey is not without faults. It takes much time and effort and depends on the willingness of the farmers to furnish the needed data. The survey may not be representative of the community, especially if only a small number of farmers respond. A survey is not usually entirely objective. Some data requested call for estimates from the farmers reporting. Its reliability and validity have not been fully established.

Neither is the community farm survey without merits. It measures the results of farm practices as used in the community. We are interested in teaching approved farm practices only as a means of getting desired results. Approved practices may be used with poor results. It is the results we should measure. This the survey does.

Not only should results be measured but these results should be measured in terms which can be compared from year to year. Cost accounts measure results on a financial basis which because of price fluctuations vary from year to year. Financial measures are not entirely reliable. Financial accounts are not available from any representative group in the community. Financial measures are not practical because the data is not available. Units of production such as the number of eggs produced per hen, or the number of bushels of corn produced per acre correlate highly with economy of production according to cost account studies which have been conducted. Such information is available from objective data which can be supplied by the farmer. This type of measure is objective, comparable from year to year, reliable, and practical.

The community farm survey has fewer of the faults of the other measuring devices so far developed. It is more objective than any of the other devices which measure results in terms of actual farm practice. It measures not only the knowledge gained but the manipulative and managerial skills acquired. It measures the adaptability of the instruction to the local community and to the individual farms. It measures the rate at which new practices are adopted by the community. It measures the farming efficiency of the uninstructed farmer as well as the instructed farmer, thereby permitting a comparison of the effectiveness of vocational agriculture instruction with any or all other agencies working for the improvement of farming efficiency.

(Continued on page 64)

Using the Survey Method With Individual Teaching

R. L. HAHN, Teacher of Agriculture, Willimantic, Conn.

PROBLEMS arising from the job of supervising farm practice are common enough to teachers of agriculture. If there is any significance to what follows, it exists principally not in the problem itself nor its solution but in the use of the survey blank as an aid to teaching thru project supervision. Project supervision is fundamentally a teaching procedure.

Raymond Cobb is a typical farm boy, as yet undulled in curiosity or initiative. When he stopped after class to tell me his pullets were not then laying as well as his Dad's, he was not accepting the fact as final but was inquiring as to the probable trouble. Raymond is a freshman in high school and can well use his father's results as a measure of his own progress.

Supervision of his problem was handled as follows. A few questions put to the boy convinced me he had a situation calling for analysis. Reaching into my teaching files, I pulled out the accompanying survey blank, familiar to most instructors in form if not in content. (The blank was the outgrowth of a study of desirable feeding practices made in another class and later mimeographed.) Together we listed a few facts from his project as called for by the blank. As he could not answer some points readily offhand, I suggested that he take the blank home with him and return it to me the next afternoon. You will note that the blank called for a fairly comprehensive survey of the situation in his egg production project.

The following is a copy of the blank form used by the boy in checking on the home practice in this particular activity.

The use of a survey blank to help a learner diagnose his problem is the thing I wish to emphasize. For that reason I

shall omit most of the specific answers supplied by the boy. To include them might confuse the reader's thoughts with questions of operative practices rather than focus them on matters of method in supervision.

I shall particularize this far. Raymond and I found from the completed blank that apparently two factors needed attention. The supply of green food had been overlooked and the body weights of the birds were somewhat below those of Dad's birds hatched earlier. The green food was easily rectified and the body weights responded to a slight addition of carbohydrates (in this case whole corn) to the ready mixed scratch feed being used.

Naturally, and rightly, the boy's objective was to have his birds lay as well as Dad's or better. We took care of that.

As a teacher, I had other objectives of an educational nature. These and others are I believe implicit in the philosophy of project activity, but I am afraid are some times overlooked by the busy teacher. On the other hand oversight of these other values may not be due so much to lack of time as to failure to identify a natural situation for obtaining those values.

Foremost of these educational objectives is that of developing in the learner more ability to analyze his difficulties from a number of angles. With farm organization and economics as they now are, we have little use for the type of operator who can only carry out directions and solutions furnished by others. Plenty of farms can use one or more individuals who can think thru their problems. It is certain that this use of the survey enabled the boy to find and solve his problems. Its use demonstrated to

him a method for thinking and required practice with that method.

Next in order, tho not in importance, as an objective may be placed the desire to stimulate the boy's curiosity if possible. Stimulating the curiosity of a learner in the direction we would like to have him think seems an important objective to me even tho we know so little about effective techniques for doing so. Did it work? Yes, in this way. The blank called Raymond's attention to some practices for which he had received no instruction as yet. For example, he knew for purposes of the blank that cod liver oil was not used in his ration. In our discussion, "What does cod liver oil do?", and, "How do you use it?", seemed to indicate that he was becoming curious along a new line of thought for him. It does not necessarily follow of course that just any or every survey blank used will work that way. It is the belief of the writer that most surveys, that are intensive enough to reveal significant matters of practice are likely to contain points of this kind.

Briefly, I would call attention to two other considerations in this use of the survey form. To instructors like myself with student projects scattered over eight townships and three counties, the economy in this form of teaching thru project problems is important. Travel time is not always necessary or well used. Returned sheets of this kind filed away sometimes provide useful material for reviewing or intensifying with a class the perception of similar work previously learned. It is not advocated that this device be substituted where a supervisory trip is needed or where a visit with a class to a problem situation is possible. As a supplementary method it has a legitimate use.

Enterprise—Poultry
Job: Feeding for Egg Production

Report on Practice Used

Amount of grain daily.....lbs.-qts.
A.M.....lbs.-qts.
P.M.....lbs.-qts.
Amount of mash daily.....lbs.-qts.
Amount mash fed wet.....—
Kind of green food fed?.....
Amount green food daily?.....
Do birds always have:
Water?.....
Oyster Shells?.....
Grit?.....
Cost per 100 lbs. scratch \$.....
Cost per 100 lbs. mash \$.....
Grain Mixture?.....
Mash Mixture?.....
(Remarks—other side)

Name.....
Date.....
Are birds active?.....
Are birds underweight?.....
Are birds overweight?.....
How long has this feeding method been in use as it is?.....
Number of birds?.....
Percent pullets in Nov.?.....
Size House?.....
Percent egg production yesterday?.....
Signs of ailing birds:.....
Ever fed cod liver oil?.....
Ever fed epsom salts?.....
Ever fed charcoal?.....
Ever fed semi-solid?.....
Is water heater used?.....
Floor made of?.....
Kind of litter?.....
Depth of litter?.....

Securing Interested Students

IN ORDER to secure interest and enthusiasm for agricultural work it is necessary to have boys who are vitally interested in the work. Two or three disinterested boys can and often do spoil the morale of the entire class.

It is too often the case that boys enroll in agriculture to avoid taking some other course which has the reputation of being more difficult. We have practically overcome this condition in our department by making a more rigid project requirement and planning the courses so that the disinterested students will fail to reach the required grade at the end of the first semester. This procedure may seem to be rather severe, but it has proved itself more valuable in obtaining results than all the talking an instructor is able to do. It has an added advantage in that the agriculture department does not receive the flunkers of the other courses.—B. A. Tomlin, Carthage, Illinois.

"The community as a school is more powerful than the schools of the community."—Glenn Frank.



Evening Schools



Summer Evening Classes Effective

H. J. B. TURNER,
Teacher of Agriculture,
Braselton, Georgia

SEVENTY-THREE farmers received instruction in the Braselton community, Georgia, during August, 1930. This class was held at the "laying-by" season.

The people of this community are in the habit of attending protracted church meetings after having finished the cultivation of their cotton. The church meetings were held in the mornings and at night. We decided, therefore, to hold our agricultural class in the afternoon. Since most of the farmers attend the church services they were in a frame of mind to come to the school building for the agricultural class. A minimum of one and one-half hours was used for each class. During the course of three weeks we had 24 hours of instruction in agriculture.

The class met for the first seven lessons at the school building where the members studied the managerial aspect of the jobs in the soil improvement enterprises and terracing, which were as follows:

1. Determining the winter cover crop to grow.
2. Procuring vetch seed.
3. Procuring fertilizer for vetch.
4. Inoculating vetch.
5. Planting vetch.

After the managerial aspect of these jobs was taught the class met in the field. The first field study was made by meeting with four farmers who had studied these problems last year, and a comparison made in both corn and cotton with areas where the cover crop was grown and areas where no cover crop was grown.

The operative aspect of the terracing job was taught by dividing the class into four groups representing four sections of the community. One man in each group who had taken this work last year was selected as a leader. This leader then took his group and with my help taught the members of his group to run terraces. We did not expect to give all the farmers in each group the ability to run terraces this summer, but we did

get a few in each group to do a good job. We probably will continue this work for several summers.

Much interest and enthusiasm is shown in this class. One member of the class told me last night: "There is a whole lot more to this course than you would think and the best way that I have found to get some of it is to do it."

Every member of this class has indicated that he will plant winter cover crops and properly terrace his land this fall and winter.

groups of farmers and were held in 20 different locations in the county. Atlantic County has been maintaining these evening classes for the past 16 years. That is, the first evening classes for adults were held in the winter of 1914-15 and they have been held every year since then. The frequency of meeting varies with the different groups. Some groups met at weekly intervals, others every other week, and some have meetings thruout the year. The general courses and the tractor courses were given dur-



Evening Class Members at Braselton, Ga., Studying Effects of Vetch Growing on Corn Production

Atlantic County, N. J., Has Extensive Program

W. B. McDOUGAL,
Director, Atlantic County Vocational Schools,
Pleasantville, N. J.

DURING the past year the four agricultural instructors in Atlantic County held 20 different evening classes for groups of farmers desiring agricultural instruction, in addition to high school courses.

These meetings were held in school houses or grange halls convenient to the farmers attending. There was an enrollment of 335. Classes were all held during the evening or at times that would not conflict with regular farm operations. The courses included vegetable growing, tractor and farm engine repair, practical general agriculture, marketing, fruit growing, and poultry raising.

These 20 classes were for 20 different

ing the daytime and were continued daily until these courses were completed.

Mention has been made of the subjects discussed in these courses. Nine of the groups studied poultry husbandry. Three groups brought in their own tractors or farm engines and repaired them under expert supervision. The total was 14 tractors, 3 power sprayers, 2 engines and 1 magneto. Two groups studied vegetable problems. One group met for the study of marketing problems. One group met for the study of fruit growing and four for general agriculture. The total enrollment of 335 attended a total of 216 meetings. Eighty-five percent of these attended at least 30 percent of the meetings of their particular course. Out of this enrollment there were 214 farm enterprises listed for supervision in the early spring. Additional ones have been listed since.

Some of those enrolled in these classes have been enrolled in evening classes for years. Strip films and motion picture films are used where possible to emphasize good practices. Charts and tours or field trips are also included in the methods of presenting materials. While the lecture method is often used to start a meeting it quickly becomes a general discussion. Often the instructor's wits are taxed to call a halt without spoiling a meeting after two or two and a half hours of discussion.

Vocational Contests will be held in St. Louis, Missouri, October 11 to 13. Dairy Judging is held Saturday at 8 A. M. Milk Judging on Saturday afternoon. Poultry Judging on Monday at 8 A. M. Public Speaking Saturday evening.



Summer Follow-up Class in Cotton Fertilizing, Braselton, Ga.

Evening School Brings Profit to Farmer

A. P. FATHERREE,
Teacher Vocational Agriculture,
Catching, Mississippi

"I HAD never made as big a crop in my life as I did in 1928, the year before vocational agriculture was put in the school in my community," says Mr. E. M. Sylvester, a 64-year-old planter. "In 1928 I had 110 acres in cotton and made 68 bales, 309 pounds of lint to the acre.

"Smith-Hughes work was put in the school in July, 1928, and I attended the evening class held on cotton production in the fall and winter of the same year. Facts were brought from the experiment station and put on simple charts and presented to us farmers so that we could see the gains in money value if we would follow the recommendations of the station. After being presented with these facts, we were left to draw our own conclusions and make our own decisions. I carried my decisions out and what did I get?"

"In 1929 I had 118 acres in cotton and produced 135 bales, 572 pounds of lint to the acre. That was an increase of 263 pounds of lint per acre. At 18 cents per pound the lint was worth \$38.34 per acre. There was an increase of 33 tons of cotton seed on the 118 acres. Valued at \$36 per ton the seed was worth \$1,188 or \$10.01 per acre. The increase in seed and lint amounted to \$48.35 per acre for the fertilizer, \$8 per acre for the extra picking and \$3.94 per acre for the extra ginning made a total of \$15.84 the extra cost of producing the increase per acre. The net value of the practices I carried out amounted to \$32.51 per acre or \$3,836.18 for the 118 acres."



A. P. Fatherree and His Prize Student

[Editor's Note.—The above is only one of thousands of similar stories which might be told. The profit which this one farmer made due to the work of the Vocational Agriculture teacher was greater than the teacher's annual salary.]

Prof. G. A. Schmidt of Colorado is studying at Columbia during the fall semester; Prof. G. J. Dippold of Missouri is on leave of absence for the year and is enrolled at Cornell; both are pursuing a PH. D.

Evening Classes Develop Year Round Activities

HOWARD McCLARREN,
Westerville, Ohio

THE first evening class held in the Westerville community met January 10, 1929. The class was made up of students ranging in age from 18 to 60. In many cases fathers and sons who were working together on farms as partners were enrolled.

The class started as the result of a demand on the part of farmers in the community for some systematic instruction in dairy production. The class met each Wednesday evening in the local high school building for a period of 12 weeks. The meetings averaged two hours in length. During the spring of 1929 the 12 meetings had an average attendance of eleven men. A total of 26 were enrolled for the course.

At the close of the meetings it was thought that some definite steps should be taken to carry on the work beyond the discussions of the classroom. These farmers organized themselves into a local milk testing association. They were asked to take a composite sample from each cow in the herd on the first Monday of each month. In addition to taking the samples each farmer was furnished with a daily weight record sheet for his herd. A charge of 5 cents for each sample of milk is made to cover the cost of testing.

During the first year which just closed a total of 954 samples were tested at a cost of \$25. The cost of testing included the cost of acid and glassware and 30 cents per hour for the labor of the day-school agriculture students in doing the testing. A by-product of this work has been the fact that several of these day-school students have had practical experience in the keeping of records for their fathers as well as to have had a part in doing milk testing which was more than practice work. During the year which just closed July 1, 1930, 23 different farmers were served in the testing and records work. In the meetings which have been held on the first Monday night of each month during the last year, 32 men have been enrolled in the class work. There was an average attendance of 14.5 students at each meeting.

A part of the instruction for these meetings was given by the local agricultural instructor and a part by the Agricultural Extension specialists from the Ohio State University. The problems around which the work of the past year centered were: methods of marketing milk as outlined by The Scioto Valley Milk Producers' Co-operative Association; (This association is the local co-operative organization of the section); improvement in methods of feeding dairy cattle; the determination of standards on which to base the removal of cows from the herd; and means of improving the quality of the milk produced. The methods of instruction which were used in "putting over" the work included, the use of charts, mimeographed material, bulletins, open discussions and lectures.

Twelve of the members of this group recently accompanied the instructor on a tour of farms owned by Ohio Master Farmers and outstanding dairy herds in Southern Michigan. A total of over 500 miles was covered in this educational

tour. In the plans for the second year's work, it is anticipated that more accurate feed records will be kept, more members will bring samples in for test, a larger number of farmers will plant legumes or increase their acreage of them and that more co-operation will come about between the Westerville business men and dairymen.

Some of the results of the first year's work which may be cited are: a reduction of 10 percent in the number of cows kept during the past year (the boarders) were removed, more satisfaction among the farmers regarding their plant tests, more interest of business men in the problems of the farmer than ever before, and more pride on the part of the dairyman in his business.



The Westerville, Ohio, Evening Class
Studying Shorthorns With an
Ohio Master Farmer

Seasonal Meetings to Follow Evening School Course

J. C. SELLARS,
Teacher of Vocational Agriculture,
Midland City, Alabama

DURING the fall of 1929, adult farmers of the Lewis School district met twice a week at the Lewis School building to attend evening school classes. The problem was cotton growing.

The fall was chosen as the best season of the year for the meetings because the weather and road conditions were best at this time and also on account of a short crop most of which was gathered early so that the farmers had more leisure time. The members agreed that the meetings should be held on Tuesday and Thursday evenings at a local two-teacher school building located eight miles from Midland City in the center of a thickly settled farming community.

Twenty adult farmers were enrolled as regular members. The average attendance was between thirty and forty.

Much interest was taken in the classes. On account of the failure of the cotton crop of 1929, the problem of cotton growing was of vital importance to the members. The classes consisted of informal discussions in which practically every member took part, with the teacher leading the discussions.

Individual farmers made comparisons of the methods they had used with those of their neighbors, and the causes of profit or loss were determined. The methods recommended by the Auburn Experiment Station were presented and discussed favorably. The members decided to follow these recommendations as closely as possible. In some cases where the members were tenants all of the recommendations could not be followed. However, all members agreed to attend seasonal meetings on problems of group interest at intervals during the winter and spring months and to keep records of their projects for 1930.



Farm Mechanics



Securing Worth While Shop Jobs

HUGH T. WILLIS,
Williamsburg, Kansas

A BIG feature in securing really worth while shop jobs for boys in my classes, especially in a new department such as I organized here last year, is to get the whole-hearted support of "Dad." That means convincing him that the boys can do satisfactory and economical work.

I have followed the practice of going out to the farmer myself and suggesting, when the opportunity arises, that we do a certain farm mechanics job for him, one which perhaps he had not thought practicable. The boys then do the work under careful supervision and it is surprising how the farmer will talk up our shop work. Boys mentioning the job at home almost invariably results in Dad finding similar work for them to try.

On the surface of it, there is nothing new at all in such an idea, but if the job happens to be one unusual to the community it is surprising what results accrue. Last year one such job here was refitting timber saws, which in most communities are in a very bad condition. We built up quite a reputation for timber saw fitting, overhauling a dozen or so of many types, to say nothing of over three dozen hand saws refitted.

Perhaps it is prosaic to mention it but the worthwhileness of shop jobs depends largely on the teacher. Standards can be kept up by proper determination. It is easy to let the jobs "peter out" to tinkering jobs, and I have found in my work that at certain slack seasons the teacher must "take the bull by the horns" and institute larger and more important work. At one time last winter we had over \$100 of school board money tied up in material in a brooder house, an advanced type straw loft hog house, a hay rack and a feeder, in a successful attempt to jack up lagging interest, or rather overcome a psychological depression season. The articles encouraged the boys to build similar ones and they were all sold, with labor costs added, later in the season.

Business Men Co-Operate

EDWARD H. BROWN,
Norway, Maine

The following is the outline of our Farm Shop Course:

Names and use of tools	Rope work
Tool sharpening	Harness work
Fitting handles	Concrete work
Drawing	Plumbing
Glazing	Electricity
Woodworking	Belt lacing
Painting	Forge work
Saw fitting	Cold metal work
Soldering	Leveling
	Drainage

In our locality the modern farm carries a wide variety of equipment. The effectiveness of this equipment and the opportunity of conserving labor by its use depend upon its handling and care—a certain degree of mechanical ability is essential to successful operation.

Instruction is given largely by the project method. The hope is to give the pupils the instruction in those activities in which they are most interested and which will help them most in their future work.

Some of our special shop projects are the construction of poultry houses for farmers, boys project poultry houses, construction of egg cases, self-feeders for poultry and hogs, milking stools, water fountains for poultry.

Farm machinery is taught by visiting a near-by sales room and new machines are set up and their operation studied. Local farm machines are brought in for repair work.

The patrons and the business men as a rule are much interested in this work.

Briefly stated, my objectives in Farm Mechanics are as follows:

1. To give the boy training in the correct use of tools and equipment.
2. To give the boy training in the appreciation of good workmanship and how to obtain this kind of work.
3. To teach the boy mechanical skill in making things which have value.
4. To give the boy such essentials of the different jobs listed in the course as will enable him to make satisfactory, practical repairs of farm equipment and to construct devices of aid in his work.

Machinery Proves To Be Interesting

C. L. TROWBRIDGE,
Turlock, California

IN STRIVING to make our Farm Mechanics course practical at Turlock, we introduce as much farm machinery into the second year work as is possible, believing that the cost of production must be constantly lowered if farmers are to be financially successful.

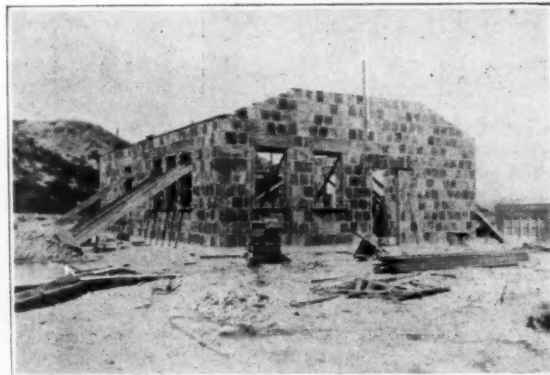
Probably the most important machinery we work on is brought in from the farm homes of the boys. These boys have learned about the major enterprises in farm mechanics during their first year, and are now ready to make an intensive study of what makes or breaks a good many farmers. We go as far as possible in getting the boys to overhaul all the machinery on the farm that we can get to the school shop.

The jobs on the machines vary. If the machine is needed in a hurry we make the necessary repair and send it out at once. However, we try to get the machine when it is not going to be used for some time so that the boy, with helpers in the class, may take the machine apart, examine it and determine how it may be repaired if broken. They decide on what parts need replacing and order them from the local dealer. All parts are thoroughly cleaned and when re-assembled, given one or two coats of paint which has been mixed from dry pigments, linseed oil, zinc and turpentine.

So far we have never had quite enough machines from the homes to use all the school time. We are glad of this extra time, as the implement dealers in town are kind enough to let us have machinery to study. We study these machines either at their store, or the dealer may have a knocked-down machine—such as a cultivator, plow or harrow—brought out to our shop, and the boys set them up. They study the material and its use in each part as the machine is assembled. Last year dealers were glad to let us use three different makes of tractors and implements at school, plowing, discing and leveling our eight-acre athletic field.



Starting Shop Foundation



The Walls Completed

An Example of a Class Shop*Project

Agricultural Education October 1930

Farm Mechanics in Connection With Grain Production Projects

C. C. COOK,
Assistant Supervisor,
North Dakota

PEOPLE are realizing that the farm mechanics work is an important phase of our vocational agriculture program where it is taught as it should be. Never before has the farm machinery phase of the farm mechanics work been appreciated as it is today in our grain growing sections. With farm prices at the present low level the farmer must put forth every effort to produce economically; otherwise he will find himself in the red at the close of the year. It is not a question of how much a farmer can produce but his margin of profit.

Farm machinery plays an important part in the production of grain products, consequently if the farmer is to produce economically he must make the most efficient use of farm machinery possible. This phase of our farm mechanics program has been neglected in most shop courses. Many schools give none or very little training in how to select, care for, repair, and operate farm machinery. Many pieces of machinery are set aside and replaced by new when they might have been comparatively and inexpensively repaired.

It is true, however, that the construction of new projects is probably more attractive and motivating to a boy than working on an old rusty piece of machinery, but an appreciation of repair jobs should be developed in every boy. A boy should be encouraged to do repair jobs as long as it is economically profitable. Perhaps the boy would be more interested in repair work if he realized the value and importance of such work and also if he were permitted to paint the repair job, thus making it more attractive.

Many high-powered salesmen are ready to greet the farmer only to tell him how badly he needs new machinery and to tell him how easy it is to buy under the new finance systems. If our future farmers are going to cope with the conditions which now prevail, our present students must be trained to have an appreciation of when to purchase, the proper selection, care and repair of machinery. Not only must they have this appreciation but they must have a knowledge of the skills necessary to do the ordinary machinery repair jobs.

Various devices such as sweet clover

seed harvesters, grain dusters, and so on, may be made in the shop to aid farmers in the handling of their crops. Frequently such devices can be made with very little cost which will do just as effective work as a real expensive one obtained from a commercial concern. The success or failure of this work depends every largely on the ability, attitude, and initiative of the instructor.

Grading by Points

L. C. SHANK,
Teacher of Agriculture,
Fallon, Nevada

[Editor's Note.—This article describes an attempt to solve one of the most perplexing problems in Farm Mechanics. We would be glad to receive comments]

SHOP work should be placed on a score point basis. It makes the work definite. The boy knows just what he has earned. He knows what he must do to get good grades. He brings in from his home farm things that need repairing and making. His interest is keen and his shop work progresses nicely.

Last year I made a list of shop jobs and projects under each enterprise. Then with the aid of the class we assigned points for each job. This gave us something to work to. During the year some of the points for different jobs were increased; some were decreased, depending on what the teacher thought was most important.

The setting system is as follows:

FARM SHOP JOBS AND POINTS	
I. Small Wood Appliances	Points
1. Bread board.....	2
2. Milk stool.....	3
3. Nail box.....	3
4. Egg candler.....	4
5. Wood box.....	5
6. Tool carrier.....	5
II. Farm Shop Appliances	
1. Mitre box.....	3
2. Harness washing rack.....	8
3. Saw filing clamp.....	8
4. Saw horse.....	5
5. Bolt and screw cabinet.....	10
6. Tool cabinet.....	20
7. Work bench.....	25
III. Farm Home Appliances	
1. Broom holder.....	2
2. Dish towel rack.....	3
3. Plant box.....	3
4. Flower stand.....	5
5. Wash bench.....	10
6. Step ladder.....	8
7. Long ladder.....	8
8. Ironing board with legs.....	18
9. Kitchen stool.....	8
10. Magazine rack.....	5
IV. Stock and Barn Appliances	
1. Barn feed bin.....	10
2. Fork and shovel rack.....	4
3. Stall feed box.....	4
4. Single tree (ironed).....	5
5. Double tree.....	8
6. Barn medicine cabinet.....	10
7. Water trough.....	10
8. Sheep panel.....	10
9. Sheep roughage rack.....	20

10. Hog trough.....	8
11. Hog self feeder.....	20
12. Cattle roughage rack.....	25
13. Stanchion set.....	20
14. Horse shoeing box.....	5
15. Farm gate.....	25

V. Poultry Appliances

1. Feed trough.....	8
2. Self feeder.....	15
3. Water stand.....	5
4. Roost.....	8
5. Trap nest.....	8
6. Wall nests.....	15
7. Brooder house.....	35
8. Wheel barrow.....	25

VI. Tool Sharpening

1. Sharpening a knife.....	1
2. Sharpening an ax.....	3
3. Sharpening a wood chisel.....	1
4. Sharpening a plane bit.....	1
5. Grinding a screw driver.....	1
6. Filing an auger bit.....	2
7. Grinding a cold chisel.....	2
8. Sharpening a drill bit.....	2
9. Sharpening a scythe.....	3
10. Recondition an old saw.....	8
11. Joint, set and file saw.....	8
12. Sharpening timber saw.....	10
13. Sharpening mower knife.....	3

VII. Handle Fitting

1. Wood chisel.....	2
2. Claw hammer.....	4
3. Ax or hatchet.....	4
4. Shovel.....	5
5. Pitch fork.....	3
6. Sledge hammer.....	4

VIII. Rope Work

1. Demonstrate 20 knots and hitches.....	10
2. Each kind of splice.....	3
3. Rope halter.....	6

IX. Harness Work

1. Splicing a strap.....	3
2. Repairing a set of harness.....	15
3. Making a halter.....	10
4. Making a bridle.....	10
5. Cleaning and oiling harness.....	15

X. Soldering and Sheet Metal Work

1. Soldering pan.....	3
2. Soldering bucket.....	4
3. Soldering milk can.....	6
4. Soldering radiator.....	5

XI. Simple Building Repairs

1. Cutting glass to size.....	2
2. Replacing window glass.....	5
3. Screening frames.....	3
4. Hanging a screen door.....	4
5. Screening a porch.....	10
6. Hanging a door.....	4
7. Making and applying whitewash.....	5
8. Repairing screen doors.....	4

XII. Metal Work

1. Gate staple.....	2
2. Gate hook.....	3
3. Hasp.....	5
4. Foot scraper.....	5
5. Repairing broken chain.....	6
6. Single tree hook.....	7
7. Cold chisel.....	8
8. Pinch bar.....	10

XIII. Farm Machine Repair

1. Riveting on ledger plate.....	2
2. Sharpening a plow share.....	8
3. Replacing section on sickle.....	2
4. Repairing pitman rod.....	4
5. Sharpening mowing sickle.....	2
6. Replacing worn or broken parts.....	5
7. Replacing neck yoke ring.....	5
8. Sharpening cultivator shovels.....	5
9. Sharpening harrow teeth.....	1
10. Overhauling a mower.....	25

XIV. General

1. Making a trailer.....	30
2. Making a dog house.....	18
Any other work not listed here will be scored accordingly.	

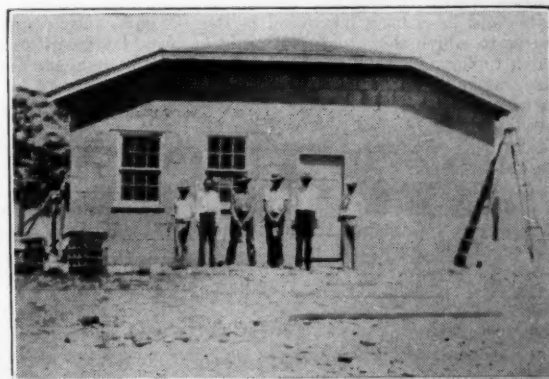
NOTICE—At least 12½ points per week must be made in order to warrant a grade.

Grades for the Month

1. 80 points or more.....	A grade
2. 65 points.....	B grade
3. 50 points.....	C grade
4. Under 45 points.....	D grade



Finishing the Roof



The Completed Shop

Conducted at Chandler, Arizona by Joe Skousen, Teacher



Supervised Practice



Getting Educational Value Out of Supervised Practice

CHARLES R. ALLEN, Educational Consultant, Federal Board for Vocational Education



Chas. R. Allen

BIOLOGICALLY, a mule is a cross between a horse and a jackass. I feel that the vocational program in agriculture is like a mule—it lies between the secondary school and the occupation of farming and has both school and occupational characteristics.

The agriculture course in high school lies between, in its characteristics, a regular secondary school and the practices in the occupation of agriculture. The attempt to push the program further towards the occupational side by supervised projects as a required part of the program makes it a part-time scheme just as in trades and industries where the apprentice spends part time in the trade and part time in school.

The stated objective in vocational agriculture is to train on the managerial side of agriculture. You have the general problem as to how to divide the Richards formula factors (E — M T M I) in the vocational program between the occupation and the school. To my thinking the supervised project plays the same part in the vocational agricultural program as does the shop work in the trade program. It is the place where you get as near as you can to occupational conditions and environment. Of course, the more nearly the project is a replica of actual occupational conditions, to that extent you are meeting the conception of the "shop" function of the supervised project.

I have had occasion in the last year to measure the efficiency of agricultural courses in high schools in a number of states and have been interested in the degree to which the supervised project was a replica of actual conditions. One case was in Florida where the dominating enterprise was raising berries and the question was how does the acreage which the boy takes compare with commercial acreage. It was about 25 percent. Of course, this acreage does not give all the problems of the commercial acreage, so the project was not an absolute replica of the commercial agricultural enterprise, yet represented many managerial problems having training values.

Granting that the supervised project is an essential part of the program, what I have to say is my own personal opinion, not necessarily the opinion of the Federal Board. To me the supervised

project is the chief educational agency with which agriculture teachers have to work. Anything which teachers give in the school is supplementary to the educational experience which the boy gets on the project. The best the school can do is to help capitalize on that experience. Consequently, educational success will depend almost entirely upon the degree to which that project experience is utilized educationally.

Now let us see what we mean by that. Education, as I understand it, is the ability to deal successfully with situations you have to deal with; consequently the degree to which the supervised project in agriculture serves its educational purpose is the degree to which it gives the boy an opportunity to deal with problems with which he will meet as a farm manager, and give him an opportunity to wrestle with them. It seems to me that this is the sum of this conception. Many agriculture people seem to think that the project is the tail of the dog and the work in school is the body. What is done in school is the tail and the work on the project is the body, in my opinion. In many cases the tail is wagging the dog. Not enough attention is given to securing maximum educational results from the project.

I think that financial return is a false standard for measuring the efficiency of a project. We propose to educate the boy and sometimes he may learn more by falling down on the job, than by succeeding. I am much opposed to using the financial return as a measure of project educational efficiency for several reasons. In the first place it puts the pressure on the teacher to do the thinking for the boy. Therefore, it seems to me that agriculture teachers should give more attention than they have to discover the educational values in the project, and second, to find out how to get these values out. For example, if a boy came to me with a plan I knew would not work successfully, I would tell him to go ahead and let him find out for himself, except of course in extreme cases where damage would be irreparable.

In managerial work there is no rule to follow. You cannot say, "This is the one right way to handle this situation," because no two situations are alike. Consequently, every time you deprive the boy of the opportunity to think a problem thru and to check the results of his own thinking, you have deprived him of an educational opportunity. If your purpose is training, then what comes out of the training work which is of a concrete, material character is merely a by-product. What we are responsible for is the additional ability the

student has secured to do the kind of thinking that we are training him to do. Consequently, the money that he makes or loses or the showing he makes at the agricultural fair, is to my mind a by-product. The trouble is that so many people have their eye on the by-product and think that is the main product, consequently, the most important problems agricultural instructors have are first, the determining of the opportunities for training which are in a project, and second, to so handle the supervision of those projects that the maximum educational value is gotten out of them. By educational value I mean this. The boy is supposed to go out and stand on his own feet and become one of those farmers who is not distressed. He will do this in proportion as he has been equipped to deal effectively with managerial problems.

There are three ways to solve such a problem. There is the gambler's method, where you have to choose between possibilities, as when you flip a cent and say, "Heads, I'll do this; tails, I'll do that." The second thing that you can do is to copy. You say that, "Under certain conditions I know that so-and-so did so-and-so, therefore I think I will do the same thing." This may be called the "copy cat" method. About three-fourths of the things that are done and decisions that are made in business, including agriculture, are either on the gambler's choice or the "copy cat" method. But successful people utilize a third method which is essentially this: First, spot your problem; second, assemble facts; third, select functioning facts; fourth, evaluate functioning facts in terms of your experience and your intelligence; fifth, as a result, make some sort of decision as to what you are going to do; you may choose between several plans you know of, or you may evolve a plan; sixth, when you have made your decision, proceed to execute it. If the decision has been straight and if you have chosen functioning facts, and all the functioning facts, you succeed. One can fall down by having an incomplete list of functioning facts; the evaluation may be poor; the choice may be poor, and the execution may be bad. In any of those cases one falls down on the job as a manager.

Some such line of thought as this is what successful people go thru in management. Teachers want the boys they are training to take the last method rather than either of the first two methods. In that way teachers want to do what they can to establish the right habits of managerial thinking. The great field for doing that is in the project because there the boy is running up

against real problems to a much greater extent than in school even at best. In proportion as teachers do the thinking for the boy, they will make him less efficient. Every time that teachers deprive a boy of an opportunity to think a problem thru under his own power and then check up on where he fell down, if he did fall down, just so much do teachers deprive the boy of an opportunity to get his education. It is hard to stand back and let him fail, but it may be mighty good for his soul. It is hard for teachers who have been trained to the idea that they should do the thinking for the boys to get away from that idea and realize that in the proportion that they do anything to deprive the student of the opportunity to think, they are falling down on the job.

Let the boy go thru the different thinking steps and if his thinking is not straight he will find out where he was wrong, whether he did not select the right facts, failed to evaluate correctly, whether his decision was unwise, his execution good or bad. Every time the boy has a chance at a managerial problem, let him tackle it. Within reasonable limits, take every opportunity the project offers to give him a chance to go thru the thinking procedure and see if his thinking is straight or not; that is real teaching. Just how one is going to do it is up to the teachers, but supervision should not be considered as simply checking results. One may know that the boy's plan is wrong, but let the boy try it out and see what the result is. Then study out with the students wherein the failure lies. The product is a boy who has been trained to think straight about the problems he will have to deal with and the project was set up to bring out the problems to teach him to think straight. I want the boy to forget the material outcome of the project. Teachers should not check the value of their teaching by the amount of money the boy made or by the extent to which the success of the work has given your course a higher standing in the community. These things are good, but the teacher's primary responsibility is to turn out boys who have something in their heads that will make them successful farmers. One product is the trained boy, not the pigs or so many bushels to the acre; the boy trained to approach his managerial problems in the right way. *If you put a fat hog ahead of a human boy you are a poor teacher.*

Teachers also want the boys to be successful. They want opportunities to come up in the project work to let the boy try his hand. They want opportunities for the boy to show initiative. They want the boy to be able to dig up technical information for himself without the teacher's help so that he will know where to look and know what kind of information he needs; therefore, you must give the boy an opportunity to do that on the project. Teachers want the boy to have some ability to think managerially; then every opportunity on that project should be a chance to think and see wherein he was right or wrong. If you want the boy to be interested in agricultural literature as such, not for technical knowledge, then there should be an opportunity for him to come in contact with that sort of literature.

If somebody would undertake to make a list of the educational oppor-

tunities in an ordinary project and undertake to find out the potential training values that can be pulled out of a project by the agriculture teacher, then I think we would have something.

If what I say is true, and if the main education goes on in connection with the project, then the school work becomes subsidiary to the project, which means that the entire time of the agriculture school work should be given to giving those boys opportunities to work out individual problems which have come up in connection with their projects. I hope the time will come when each boy will work on his own problems that come out of his own red-hot stove. The project should dominate what is done in school. Agriculture cannot do good work while running organized class work which does not correlate with the project work of the boys. This might be difficult to do, but it will have to be done eventually.

An Agricultural Education Luncheon Club

G. A. SCHMIDT,
Teacher-Trainer in Colorado Agricultural College

ONE of the outstanding features of the work in agricultural education of the summer session of the Colorado Agricultural College is an Agricultural Education Luncheon Club. This luncheon club, as the name implies, is composed of agriculture teachers attending the summer session of the Colorado Agricultural College and of the faculty in the department of agricultural education.

The club meets every Wednesday at noon in a separate room in the college cafeteria and at each meeting one or two addresses are given by prominent men engaged in vocational education. Dr. Charles R. Allen, research specialist of the Federal Board of Vocational Education, was the speaker at the particular meeting at which the above photograph was taken. Dr. C. H. Lane, also of the Federal Board of Vocational Education, attended the meetings of the Agricultural Education Luncheon Club while at the Colorado Agricultural College this summer and his picture is in the foreground. He also addressed the club at one of its meetings.

Since the summer session work in agricultural education of the Colorado Agricultural College is divided in two three-week intensive training periods, a presiding officer, who also acts in the capacity of president of the club, is elected for each three-week period. H. D. Garber of Merriam, Kansas, was the presiding officer during the first three-week period, and Mr. Ward Chase of Alva, Oklahoma, the big man to the

right and back of Dr. Lane in the picture, was the presiding officer and president of the club during the second three-week period.

The Class Shop Project

JOE SKOUSA,
Chandler, Arizona

IN DISCUSSING the class shop project I have in mind any job that requires either the whole class or a part of the class in order to complete the job in a reasonable length of time.

The question might arise, why have such projects? First, they give a chance for greater teaching content. Second, they give a chance to work under actual conditions of doing the job. This will give the boys a wider range of activity, which will increase their general knowledge. Third, they may be jobs from individuals who will finance the project. Fourth, the boys take pride in doing jobs that other people can see.

In order to have such projects the instructor must find some one that needs the work done. As a general rule he can find men who are willing to furnish all materials and pay a small sum for labor. Good type jobs are concrete walks, road ways, small farm buildings, hay racks, farm machinery repair, and gas engines. Gas engines seem to be one of the most interesting projects with the boys.

Boys learn by doing and such projects will give them actual training in doing the job. The teacher gains prestige in the community by such work, because the people can see what the boys are doing. The boys also like to talk about what they have made and it helps to advertise the work.

The last word is, *be sure the job is well done.*

A Class Project Show

The Future Farmer chapter of the Winfield, Kansas, High School recently sponsored a beef calf show that was a distinct success. The animals were from projects owned by the boys. There were 24 Herefords and 12 Shorthorns in separate classes. Prizes of \$100 were awarded by the county breeders' association and the town chamber of commerce.

Three of the best calves were taken home by the boys to be finished for the fall shows. The others were sent to the Kansas City markets where they were sold at a special auction sale. Two of these calves brought \$11.25 per hundred which was the top price for the market that week. Mr. Lowe, the teacher of agriculture, and seven of the boys, accompanied the calves to Kansas City and saw them sold.



Colorado Summer Session Luncheon Club



Future Farmers of America



Why a Local Chapter of Future Farmers

A. H. HILPERT, Teacher of Agriculture, Atwood, Kansas

SOMEONE has said that nothing since the passage of the Smith-Hughes Act itself has affected American agriculture as the organization known as Future Farmers of America. Whether or not we are ready to subscribe to this view in its entirety the fact is that the movement is spreading rapidly, not only in Kansas but thru all of the states.

One year ago this past April the State Chapter was organized with thirteen active chapters which had recognized delegates at the meeting. We have now forty chapters with more coming in each month, until it now looks like we will very soon have our 100 percent membership.

The Atwood Chapter was organized in September, 1929. At its first charter night meeting on October 1 the chapter entertained as many of the Vocational Agriculture departments of northwest Kansas as could conveniently come. At this meeting the charter members of the McDonald Chapter were initiated as Green Hands. About seventy persons were present with representatives from six schools of this part of the state who contemplated forming chapters of Future Farmers. Before the meeting was over the McDonald Chapter had made arrangements with the Bird City group and they in turn with St. Francis for a like meeting. There is every reason to believe that Future Farmer activities have had a great deal to do with getting schools together in northwest Kansas. Another such regional meeting was held at Atwood in May in which four schools participated. At this meeting the Future Farmer degree was put on. After each meeting the advisers got together for a discussion.

Many of our schools have long had "Ag" clubs. Some have rightly hesitated whether they should disband this group and start another. I think that a teacher need not hesitate about talking this over with his boys, and with them, discuss the added advantages of belonging to a national organization. This fact appeals to many boys for if they feel themselves a part of a nation-wide movement they will take a keener interest in the enterprise. And, too, the idea of a national emblem that can be worn and seen is a vital factor in this persuasion, for boys like to exhibit emblems just as do grownups.

I have had a few teachers tell me that they did not know how to proceed in organizing a chapter. Plans, constitution, charter application blanks, and ritual may be obtained from the office of the State Supervisor of Vocational Agriculture. I would advise each teacher

to obtain this information some time in advance of the time of organization and the details pertaining to installing a chapter. He should also let the superintendent or principal go over them so that there may be complete understanding and co-operation of the officials of the school in the undertaking. Each step should be put up to the boys and thoroly discussed with them. The organization should result from their desires and plans as guided by the adviser, who in most cases will be the teacher of vocational agriculture. At Atwood the boys selected eight of their classmates to act as charter members. These in turn elected officers, perfected themselves in the constitution and ritual and in due time initiated the remainder of the class as Green Hands. In order that the chapter might have regular work an initiation was held each six weeks and the whole class being members by the end of the school term and once each month during the summer. The meetings are not held in school-time, evenings being preferred.

There are five reasons why I think each department should sponsor a chapter of Future Farmers:

1. It stimulates interest in the agriculture department itself. It furnishes something for the student besides study and forms an outlet for his social tendencies.
2. It quickens the interest of the high school in agriculture. Future Farmer chapters dignify departments of vocational agriculture before the whole student body. The members of the organization are looked upon with interest and respect. The vocation of farming needs dignifying and this the Future Farmers helps us to do.
3. It stimulates the interest of the parents. Parents like to see their boys taking part in things. It is akin to some of their own experiences in lodge work. We have always had a large percentage of fathers at our initiatory meeting. Then, too, the dramatic instinct is strong in most of us and this feature furnished by the ritual appeals alike to boys and parents. I would like to say here that the adviser should insist on the boys committing the ritual. It dignifies the meeting both for the boys giving it and for the candidates.
4. Development of leadership is definite. Before the advent of the Future Farmers, training for leadership in agriculture as far as vocational agriculture was concerned was largely subjective. In Future

Farmer activities the boy is trained definitely in the ways of leadership.

5. Enriches the vocational program. It affords a means of tying up the classroom work with community activities in agriculture and affords the teacher a channel thru which he may further reach his community thru evening school enrollment, community fairs, or purely social activities. It binds the boys to the teacher with a tie greater than classroom contact, dignifies the agriculture course in the eyes of the boy, and furnishes the boy with a sane avenue for self-expression.

The National F. F. A. Manual

Every local adviser, officer and member of F. F. A. should have a copy of the New Handbook for Future Farmers of America. The careful use of this publication will add greatly to the interest and efficiency of local chapters. Following is the table of contents of the manual:

Introduction; The Future Farmers of America; Purposes of the Organization; The Future Farmer Emblem; The Future Farmer Colors; The Future Farmer's Creed (new); Responsibilities of Local Advisers; Methods of Organizing Local Chapters; Schedule of Meetings; National Contests for Future Farmers; Suggestions Concerning News Stories; Suggested News Articles; Sample Minutes; Sample Committee Report; Parliamentary Procedure; Ceremonies for Opening and Closing the Meeting; Stage Setting for Meetings and Initiations; Initiation Ceremony for Green Hands; Ceremony for Raising Green Hands to the Grade of Future Farmers; Ceremony for Raising Future Farmers to the Degree of State Farmer; Constitution and By-Laws; Suggested State Constitution; Suggestions for Program of Work; Suggested Local Objectives; Suggestions Concerning the Doing of Certain Jobs; Father and Son Banquets; Songs and Yells; On Having a Hobby; Song of the Future Farmers of America; Short Plays for Future Farmers; Suggested List of Books of Interest to Future Farmers; Where to Get Future Farmer Insignia.

The Manual costs only 15 cents per copy. Order direct from The Farm Journal Company, Washington Square, Philadelphia, Pennsylvania.

C. B. Gentry, state supervisor of agricultural education, writes us that Connecticut boys are in the process of forming a Future Farmer organization.

First Annual F. F. A. Public Speaking Contest

C. H. LANE, Chief, Agricultural Education, F. B. V. E.

IN ACCORDANCE with the recommendations of the Second Annual Convention of the Future Farmers of America and the Agricultural Section of the A. V. A., a National Public Speaking Contest for members of the Future Farmers of America will be held in connection with the National Congress of Vocational Agricultural Students at the American Royal Livestock Show, Kansas City, Missouri, November 17, 1930.

General Plan

Since one of the aims of the Future Farmers of America is to develop rural leadership, there appears to be a splendid opportunity for encouraging such development thru agricultural public speaking contests. Several states have already been holding state-wide contests of this character and plans are under way to determine regional winners in the various sections of the country.

A national contest has now been made possible thru the kindly interest and generosity of Senator Arthur Capper. As owner and publisher of the Capper publications, Senator Capper will provide appropriate prizes for and defray participation expenses of four boys in a National Future Farmers of America Public Speaking Contest under the rules here set forth.

Eligibility

1. The contests will be limited to participation by one representative from each region herein listed, who shall have been determined winner in a regional contest held within the year October 15, 1929, to October 15, 1930:

North Atlantic region (13 states), 1 representative.

Central region (12 states), 1 representative.

Southern region (12 states), 1 representative.

Western region (11 states), 1 representative.

2. The contest will be open only to regularly enrolled students of vocational agriculture in all-day classes who are successfully carrying at least three units of regular school work and who are active members of chartered chapters of F. F. A. in good standing with the state

and national organization. Any boy who has received training for this contest outside of his local chapter will be disqualified.

3. The contestant representing a region will file with the regional agent, thru the state supervisor of agricultural education at least one month prior to the national contest (by October 15, 1930), four double-spaced typewritten copies of his production accompanied by a signed statement of its originality and a gloss-finish photograph of himself.

4. The regional agent for each region will file with the chairman of the national committee responsible for contests, the material listed in the previous paragraph, accompanied by a certification slip, at least two weeks prior to the contest.

Subjects

The following subjects are only suggestive as any other agricultural subject may be selected this year:

1. "What the F. F. A. May Mean to American Agriculture."
2. "The Relation of the Farmer to the Success of the Federal Farm Board."
3. "Co-operative Marketing as a Solution of Farm Problems."
4. "The Opportunities for and Limitations of Corporation Farming."
5. "What My Home Project Work in Vocational Agriculture Has Taught Me About Farm Operation and Management."
6. "Equalization of Taxes as a Farm Relief Measure."
7. "The Machine Age and Its Effect on American Agriculture."
8. "The Value of the Federal Farm Loan System to the American Farmer."

Method of Selecting Winner

Each presentation by a student will be limited to 10 minutes in length and each contestant shall be allowed 5 minutes of additional time to defend his production on questions which may be asked by the judges.

Method of Selecting Winner

1. The national committee responsible for vocational agriculture contests, with the co-operation of the Executive

Committee of the Future Farmers of America, will be in charge of this contest.

2. Three competent and impartial judges, one of whom shall be designated to act as chairman, will be selected.

3. Prior to the contest, the judges shall be furnished with the typewritten copies of the contestants' productions which they will grade and record on proper point system score cards which have been provided.

4. At the time of the contest, the judges will seat themselves apart from one another in different sections of the room in which the contest is held and will score each contestant upon the delivery of his production, using the point system score card provided. A time keeper shall be designated who will record the time consumed by each contestant in delivering his production, noting overtime used, if any, in excess of 10 minutes for each contestant, for which deductions shall be made.

5. Participants in the contest shall be known only by number and no information shall be given out as to names or home location of any contestant. They shall draw for places on the program. The program chairman shall then call each contestant by his number and announce his subject in the order of the drawings.

6. When all contestants have finished speaking the chairman of the judges will collect the score sheets of each judge, the time-keeper's sheet, and with the previous rating sheets on the written composition, a decision shall be made by all judges in conference.

Awards

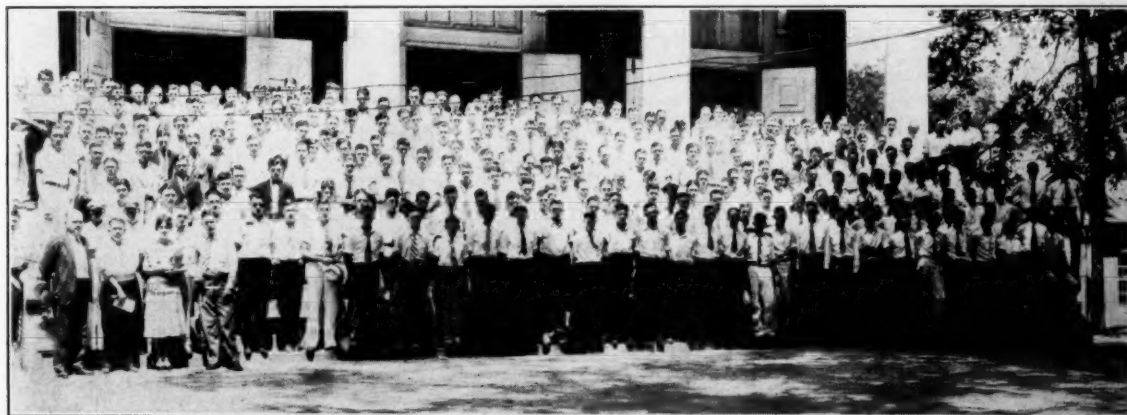
1. Prizes shall be awarded to the contestants on the basis of the judges' decision, as follows:

- \$500 for first place.
- \$300 for second place.
- \$200 for third place.
- \$100 for fourth place.

2. Travel and subsistence from their homes to Kansas City and return for each of the four contestants in the national contest will be allowed.

The national committee on contests is composed of the following men: Ray

(Continued on next page)



Over 300 attended the first annual meeting of the Alabama Association Future Farmers of America.

Fife, state supervisor, Columbus, Ohio; Guy E. James, state supervisor, Jefferson City, Missouri; William Kerr, state director, Boise, Idaho; E. B. Nelms, state supervisor, Oklahoma City, Oklahoma; C. H. Lane, chairman, and national adviser of Future Farmers of America, Washington, D. C.

A Columbia Broadcast

The contest will be held in the Shrine Temple at Kansas City, Missouri, the evening of November 17, 8 to 9 o'clock, central standard time.

The program will be broadcast over the Columbia network of about seventy stations, and it is extremely important that all Future Farmers of America, their parents and friends in and out of school should arrange some sort of a meeting and listen in. The Columbia system is making this broadcast complimentary with the hope, of course, that thousands, if not hundreds of thousands, will at least drop a card to the station thru which they listened, or the Columbia System, New York City, indicating their impression of the program. On the extent to which the Columbia System hears from these individuals will depend very largely their proposal for another year. This hour's broadcast is worth about \$15,000 to the Columbia System. Teachers of vocational agriculture who are local advisers to F. F. A. chapters have a large responsibility here. I have every confidence in their ability to discharge this responsibility in a most effective way. Distribute cards to those present and have them write a message before adjourning.

The judges selected tentatively are the Honorable Arthur M. Hyde, secretary of agriculture; the Honorable Senator Henry J. Allen of Kansas; and the Honorable William J. Cooper, commissioner of education.

How Shall We Measure?

(Continued from page 54)

Most other devices at best measure only potential farming efficiency of the immediate trainees. The community farm survey measures actual farming efficiency of the trainees and also the indirect or carry-over effect on those not receiving direct training. The survey is an even better measure of evening and part-time instruction than it is of all-day instruction.

It is high time we were checking up on our vocational agriculture instruction with objective, reliable, valid and practical measuring devices.

Field Trip as Method

(Continued from page 53)

15. Of what materials are silos constructed?.....
16. List the advantages and disadvantages of each kind.....
17. What crops besides corn are used for silage?.....

Field Trip Activities

- A. Hauling.
 1. How far is it to the field?.....
 2. Are special wagons used?.....
 3. How many wagons are used?.....
 4. How is the labor of hauling managed?.....
 5. Are extra men employed for loading in the field?.....

- How many?.....
- B. Ensilage cutter and filling.
 1. What size tractor is used?.....
 2. What size cutter is used?.....
 3. What type cutter is used: fly wheel or cylinder.....
 4. What is the length of cut?.....
 5. Are cuts made square or do stalks pass thru partly shredded?.....
 6. How does this affect power required?.....
 7. How does this affect quality of silage?.....
 8. Is water used?.....
 9. How is the silage packed in the silo?.....
 - C. The Silo.
 1. What type is this silo?.....

- Dimensions.....
2. Where is silo located?.....
3. Do doors of silo fit tightly?.....
4. Are walls of silo smooth?.....
5. Do you find cracks or openings in silo?.....
6. How deep is the silo pit?.....

Post Trip Activities

1. How does distance of field from silo affect cost of filling?.....
2. Discuss advantages and disadvantages of wagons in use?.....
3. What are advantages and disadvantages of cylinder cutter?.....
4. What are advantages of long cut?.....
5. What is the capacity of this silo?.....
6. How do rough walls, cracks, and openings affect quality of silage?.....
7. Discuss the location of silo visited from standpoint of convenience in filling.....
8. What crops besides corn are used for silage?.....
9. How large is the silo visited?.....
10. How many tons of silage will it hold?.....
10. Problem.

The charges for filling the silo are:

- a. Machine cost.....
- b. Manlabor.....
- c. Horse labor.....
- d. Hours required to fill silo.....
- Find the total cost of filling silo.....
- Find the cost per ton of filling silo.....
11. Compare the cost per ton of putting up silage with that of putting up hay.....
12. What percent of the feeding value of corn is lost when shocks are left standing in the field.....
13. What percent of the corn crop is wasted when corn is fed from the bundle?.....

Nebraska State F. F. A. Program of Work for 1930-1931

1. To have definitely organized and functioning chapters in every department of vocational agriculture in the state.
2. To have distinct or state meetings of local chapters or representatives of those chapters; the annual state meeting to be held in connection with the state judging contests.
3. To have a strong program of work in each local chapter.
4. To take an active part in sponsoring a more extensive program of part-time and evening classes.
5. To co-operate in any way possible with other agencies such as the Farm Bureau, 4-H Clubs, and the like.
6. To be represented at the national F. F. A. meeting by delegates.
7. To furnish a plaque to the outstanding chapter in Nebraska.
8. To have a full quota of State and American Farmers qualified.
9. To provide medals for the winners in the State F. F. A. public speaking contest.
10. To send out to all chapters a news publication at least quarterly.
11. To encourage local chapters to organize junior co-operative marketing associations.
12. To make a yearly analysis of work and summary of accomplishments in terms of the State Program.

Future Farmers of Texas Get Merit Certificates

Recently 100 vocational agriculture students, all members of the Future Farmers of America, from 15 schools representing 5 counties, met at Mount Pleasant High School and witnessed the presentation of 76 certificates of merit in terracing, according to J. L. Owens, Mount Pleasant, district supervisor. These certificates were awarded by Mr. E. R. Alexander, professor of vocational agricultural education of A. & M. College, and state adviser of the Future Farmers of Texas. Other organizations participating in the program were the East Texas Chamber of Commerce and the extension service.

Agricultural Education has received several publications during the past year which have been issued by Future Farmer Chapters. These have been uniformly of high quality and of undoubted value. The latest to reach the office is The Future Farmer, published by the chapter at Stanley, Wisconsin, with O. G. Johnson, teacher, as chief adviser.

Don't forget! F. F. A. Contest, November 17, 8-9 p. m.



Texas F. F. A. Who Received Certificates of Merit in Terracing

Agricultural Education October 1930

